



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/520,494

01/07/2005

Andreas Finke

5255-37PUS

9782

27799

7590

10/01/2010

COHEN, PONTANI, LIEBERMAN & PAVANE LLP
551 FIFTH AVENUE
SUITE 1210
NEW YORK, NY 10176

EXAMINER

STRIMBU, GREGORY J

ART UNIT

PAPER NUMBER

3634

MAIL DATE

DELIVERY MODE

10/01/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,494	Applicant(s) FINKE, ANDREAS	
	Examiner Gregory J. Strimbu	Art Unit 3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2010 and 28 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10, 14-19 and 23-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 14-19 and 23-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

The request filed on April 28, 2010 for a Request for Continuing Examination (RCE) under 37 CFR 1.114 is acceptable and an RCE has been established. Any previous finality is hereby withdrawn and a new action on the merits follows. Any newly-submitted claims have been added. An action on the RCE follows.

Drawings

The drawing correction filed June 27, 2007 has been approved.

Claim Rejections - 35 USC § 112

Claims 10, 14-19 and 23-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitations such as “a bearing shaft received through a bore hole” on lines 12-13 of claim 10 render the claims indefinite because it is unclear how all of the rollers can be mounted on one bearing shaft. Recitations such as “with the fixed door leaf” on line 17 of claim 10 render the claims indefinite because they are grammatically awkward and confusing. Recitations such as “the each said” on lines 1-2 of claim 16 render the claims indefinite because they are grammatically awkward and confusing. Recitations such as “the entire movement” on line 2 of claim 17 render the claims indefinite because they lack antecedent basis. Recitations such as “said permanent magnets” on lines 7-8 of claim 28 render the claims indefinite because they lack antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 14-16, 18, 19, 23-25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakagami et al. (US 5134324) in view of Tucker (US 3105272) and Belna (US 4624617). Sakagami et al. discloses a linear drive arrangement for a sliding door, the arrangement comprising:

a guide track 4;

a stator arrangement including coils 11 fixed with respect to said guide track;

a guide carriage 20 to which a door leaf 40 of the sliding door is fixed, the guide carriage and the door leaf being movable parallel to the guide track,

the guide carriage 20 comprising: a front end and a rear end (not numbered, but shown in figure 3), a pair of opposed sides extending between the front end and the rear end as shown in figure 3, and two supporting rollers 31 supported at least at times on said guide track, the supporting rollers being disposed respectively at the front and rear ends and on a same side of the opposite sides as shown in figure 3,

and wherein each of the supporting rollers is journaled on a bearing shaft (not numbered, but shown in figure 1);

a plurality of permanent magnets 22 fixed to said guide carriage 20, wherein at least a portion of each of the permanent magnets is horizontally co-planar with said coils,

wherein the permanent magnets and coils form a linear drive for the door leaf so that the guide carriage can be driven along said guide track by said magnetic force.

Sakagami et al. is silent concerning a bearing shaft received through a bore hole in a body portion of the guide carriage and the permanent magnets and said coils forming a holder.

However, Tucker discloses a door system comprising a plurality of rollers 16, each said roller is journaled on a bearing shaft 36 which is received through a bore hole in a guide carriage 32, wherein each said bearing shaft 36 has a first end (not numbered, but shown in figures 3 and 5) on which a respective said roller is journaled eccentrically with respect to the axis of the shaft, wherein each said bearing shaft 36 has a threaded second end (not numbered, but shown in figures 3 and 5) for receiving a fastening nut 37, wherein each said roller is detachable from the bearing shaft.

It would have been obvious to one of ordinary skill in the art to provide Sakagami et al. with an adjustment means, as taught by Tucker, to increase the ease with which the position of the door can be adjusted relative to the surrounding frame.

Additionally, Belna discloses a linear drive arrangement comprising permanent magnets 42 and coils 40 form a holder so that a guide carriage 14 is suspended at least partially by a magnetic force between said permanent magnets and said coils of a stator

Art Unit: 3634

arrangement, wherein the same permanent magnets and coils form a linear drive so that the guide carriage can be driven along a guide track 12 by said magnetic force.

It would have been obvious to one of ordinary skill in the art to provide the linear motor of Sakagami et al. with added function of partially suspending the guide carriage, as taught by Belna, to reduce the amount of wear created and noise generated by moving the door between the open and closed positions.

Claims 17 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakagami et al. in view of Tucker and Belna as applied to claims 10, 14-16, 18, 19, 23-25, 27 and 28 above, and further in view of Kabout (US 5712516). Kabout discloses a linear drive arrangement wherein a supporting roller 12 rolls on a guide track 14 during the entire movement of a guide carriage for preventing a door leaf 1 from rocking relative to the guide track.

It would have been obvious to one of ordinary skill in the art to provide Sakagami et al., as modified above, with a roller that maintains contact with the track during the entire movement of the carriage to ensure that the carriage moves properly between the open and closed positions.

Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakagami et al. in view of Tucker and Belna as applied to claims 10, 14-16, 18, 19, 23-25, 27 and 28 above, and further in view of Japanese Patent Publication 2002-209371. Japanese Patent Publication 2002-209371, in figure 3, discloses a linear drive

Art Unit: 3634

arrangement comprising coils 3a arranged in two rows and permanent magnets 2 are positioned between the two rows of the coils.

It would have been obvious to one of ordinary skill in the art to provide Sakagami et al., as modified above, with a coil/magnet arrangement, as taught by Japanese Patent Publication 2002-209371, to increase the power output of the motor.

Response to Arguments

Applicant's arguments filed April 6, 2010 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

THIS ACTION IS NOT MADE FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on 571-272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory J. Strimbu/
Primary Examiner, Art Unit 3634